

# Living Colors of a Coral Reef

by Ruth A. Musgrave  
photos from the IMAX film  
"Coral Reef Adventure"



**C**oral reefs are found near many islands in warm, shallow seas around the world. These colorful, rocky ridges look like dazzling underwater rainbows—but they work like busy cities. There are homes, schools, places to eat, gardens—even tourists!

Coral reefs are made up of—coral. Coral may look like an exotic flower, but it's really a living, breathing animal. The fat petals are tentacles. The center of the "flower" is the coral's mouth. Tiny stingers in the tentacles protect the coral and catch food.



*At night, when they are safe from hungry fish, many corals stretch out their colorful tentacles to feed.*

Carl Roessler



Every nook and cranny of the coral reef is home to amazing creatures—sponges, worms, crabs, snails, sea turtles, fishes, and all sorts of underwater plants.

Many corals are soft on the inside but have a hard outer covering called an exoskeleton. When these corals die, their exoskeletons are left behind to become part of the reef. A coral reef is built up of many layers of exoskeletons covered by a thin layer of living coral. It takes hundreds of years to build up a coral reef, and some are thousands of miles long!



Carl Roessler



This sharp-toothed grouper hunts a meal among the corals. Everything in the coral reef can be eaten—including the crunchy coral itself!

These delicate little creatures are—worms! They're called Christmas tree fan worms and they live happily attached to the coral reef.







Living together in a coral reef makes for some strange friendships. This cleaner wrasse is eating the parasites and dead skin it finds in the mouth of a moray eel. The daring little fish gets dinner, and the cleaning helps keep the eel healthy.



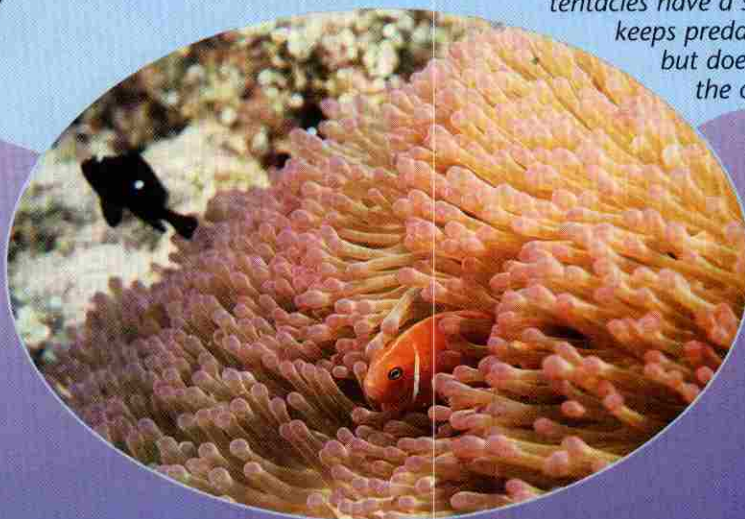
Just don't swallow at the wrong time.

All great cities have great food. In a coral reef, squid, clams, and other sea creatures eat and are eaten. Big fish eat small fish. At night, corals feed on little fish and tiny plants and animals called plankton.

You can even find little gardens in a coral reef. Damselfish eat a slimy green stuff called algae. They could hunt around for meals, but some damselfish find and protect their own tiny algae gardens.



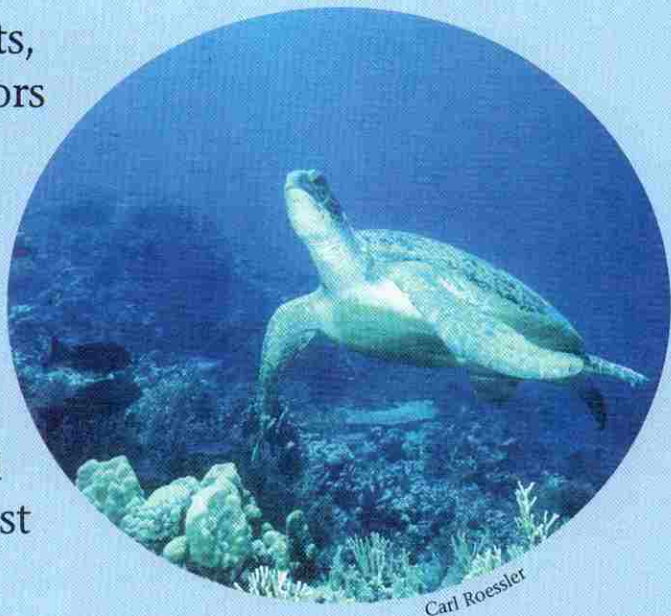
The blind bulldozer shrimp digs a burrow to attract a friendly goby fish. The goby gets a safe home, and the shrimp knows predators are near when the goby darts for cover.



This clownfish finds safety nestled in the tentacles of a sea anemone. The tentacles have a sting that keeps predators away but does not harm the clownfish.



Every interesting city has tourists, and the reef is no exception. Visitors include sharks, sea turtles, sea snakes, and people. People? It's true. The vivid colors and amazing animals make coral reefs popular places for human sightseers. In fact, you can find more different kinds of plants and animals in a coral reef than almost anywhere else on Earth!



But people need to be considerate visitors. Coral reefs are beautiful—but they are also delicate. It is important to protect coral reefs around the world, to help these underwater cities thrive for years to come.



*Many coral reef fishes travel in schools, or large groups, for safety. As the group twists and turns through the sea, predators have trouble choosing which fish to chase. The bright colors and patterns help animals hide in the colorful corals.*

To learn more about the coral reef, see the IMAX film "Coral Reef Adventure" and visit the Web site [www.coralfilm.com](http://www.coralfilm.com).



